Recording and reporting

Information on cases and outcomes seems to be well reasonably well carried out in those regions/provinces that have and continue to receive WHO/MOH support

Actions to be supported by USAID/REACH

- Ensure the NTP policies for recording and reporting are recognized, respected and integrated in the HMIS
- Ensure that all REACH recipients who undertake the provision of DOTS services, use the standard reporting and recording formats.

Monitoring and supervision

Monitoring and supervision is carried out by the MOH together with WHO (WHO provides most of the logistics) and by the NGOs themselves. According to one NGO that has several clinics in more rural areas, the security situation has precluded regular reviews. They attempt to train local staff to carry out these activities, but are aware that there needs to be more regular ongoing activities.

Actions to be supported by USAID/REACH

Monitoring and supervision (as opposed to project monitoring and evaluation) is one of the most important opportunities to maintain and enhance the quality of DOTS services, especially not only for those NGOs who are new to this thematic area, but all NGOs who are participating in the expansion of DOTS services

- Ensure that Monitoring and Supervision plans, and necessary resources to carry out those plans are part of DOTS implementation
- Close coordination with the MOH, WHO and other partners will be critical to ensure that M&S activities are not lost in the re-organization of the BPHS
- Coordinate and collaborate with the MOH in determining roles and responsibilities and lines of accountabilities are clearly defined for M&S

Towards a Strategic Approach for Malaria: The Roll Back Malaria strategy for the prevention and control of malaria focuses on delivery of three key interventions: prompt diagnosis and early treatment; prevention of infection, primarily through the use of insecticide treated bednets; and, intermittent preventive therapy for pregnant women. Before applying this strategy to any country setting, however, it is critical that it be adapted to reflect local conditions. It is of particular importance that REACH work with the MOH to ensure that any strategy for the prevention and control of malaria in Afghanistan reflect the nature of local malaria transmission, its geographic and temporal distribution, the populations known to be at greatest risk, its emergent trends, as well as local political, economic and social conditions. While the existing data characterizing malaria in Afghanistan are incomplete there is sufficient information to guide how we can best support the establishment of an effective program for the prevention and control of this disease. Still, significant gaps persist in clarifying the way forward for malaria control in Afghanistan. Chief among these challenges are the need for:

1. A multi-year strategic plan to Roll Back Malaria needs to be developed by the MOH and partners with clear objectives, targets, timelines and indicators;
2. Standardized tools and guidelines for both prevention and management of malaria need to be developed to ensure the quality delivery of the BPHS.
3. Strengthening the leadership capacity of the MOH, and in particular the new National Malaria Control Program, to ensure effective implementation of the BPHS.

As basic operating principals USAID/REACH, when supporting the expansion of the BPHS, should target the use of its Infectious Disease/Malaria money only to those provinces which have been documented to be at high risk for malaria transmission (see map, Annex 1). However, when considering the needs for expanding systems, improving quality of services, and contributing to enhanced community outreach these resources need not be limited to a specialized focus on malaria, but rather should be seen as capable of contributing to the broader goals of the BPHS.

Additional issues that need to be considered when adapting the RBM strategy to Afghanistan and **actions for REACH** support are discussed below. A summary of recommended actions, by IR/BPHS are presented in Table 1.

Prompt Diagnosis and Treatment

There are four key issues that need to be considered when considering how best to deliver effective and timely treatment of malaria

1. Malaria accounts for only an estimated 20% of all febrile cases in Afghanistan. Laboratory confirmation of malaria infection, however, is rarely available; and under the BPHS plan microscopy will be focused at the levels of the Comprehensive Health Center and the District Hospital. Since the more peripheral health services will provide the greatest degree of access to the health system to most people in malaria endemic regions of Afghanistan the large majority of malaria diagnosis will mostly likely be based on clinical criteria. It is important that the clinical algorithm used to diagnose febrile illness by health workers accurately differentiate between malaria and non-malaria causes of fevers.

   Actions to be taken by USAID/REACH

   - Work with the MOH and partners to ensure current algorithms for clinical diagnosis of febrile illness are sufficiently sensitive and specific for the diagnosis of malaria. The recent introduction of IMCI in Afghanistan provides an important platform for an integrated approach to clinical management of fever among children. However, because all age populations are equally at risk to the severe consequences of malaria infection in Afghanistan it is important that an equally robust diagnostic algorithm be developed for adolescents and adults.
   - Support the inclusion of these diagnostic algorithms for all-level health worker training for the BPHS, including its implementation in REACH provinces.
   - Support the strengthening of laboratory based microscopy at the Comprehensive Health Center and District Hospital in REACH provinces

2. Of that 20% of fever which is malaria, however, 20% of it is *falciparum* malaria, the remainder being *vivax.* Because of the life-threatening nature of *falciparum* malaria it is critical that it be treated within 24 hours of onset of symptoms. In the past both *vivax* and *falciparum* malaria could be effectively treated with chloroquine, making it less critical that there be a differential diagnosis. However, the recent emergence and spread of chloroquine-resistant *falciparum* malaria has required the development of new treatment regimens for *falciparum* that involve artemisinen combination therapies (ACT) – which are not effective against *vivax* malaria. As a consequence there is a new and urgent need for being able to not only effectively differentiate malaria from other possible causes of fever but to be able to also determine whether the malaria is due to *vivax* for *falciparum* infection. New diagnostic strategies, possibly involving the use of rapid "dip stick" diagnostic technologies, that can

used at the most peripheral health post, need to be developed for Afghanistan. In addition, better "spatial" and "temporal" data on the relative contribution of *falciparum* vs *vivax* needs to be collected.

Actions to be taken by USAID/REACH

- Work with the MOH and partners to develop an appropriate "diagnostic" strategy for diagnosis of *falciparum* malaria
- Work with MOH and partners to assess the "relative contribution *of falciparum* vs *vivax*" temporally and geographically
- Support the inclusion of this strategy in the BPHS in provinces endemic for malaria, including the training of health workers and provision of appropriate diagnostic aids, including its implementation in REACH provinces.

3. Even as implementation of the BPHS will increase access to key health services for management of uncomplicated illnesses – when cases of severe illness, such as severe/complicated malaria are encountered by peripheral health workers rapid referral to higher health facilities capable of providing appropriate care will be essential. It is important that adequate attention be given to establishing a fully functional referral system as part of the BPHS.

Actions to be taken by USAID/REACH

- Work with the MOH and partners to develop appropriate strategies for supporting referral of severe/complicated illness. In addition to focusing on the capacity of the referral system this strategy needs to include outreach to communities so they are adequately informed about the importance of complying with referrals and in turn are motivated to engage in appropriate health seeking practices.
- Support the inclusion of this strategy within the BPHS, including its implementation in REACH provinces.

4. The emergence of drug resistant malaria also reflects the frequent failure by patients to complete the full course of malaria treatment. Chloroquine and most of the ACTs require up to 6 treatments over 3 days. Unlike tuberculosis the treatment of malaria is not subject to direct observation by a provider, rather it occurs largely in the household. The failure to fully comply with these treatment regimens can lead to treatment failure and provided additional pressures for selection of drug resistant strains of malaria. It is highly important, then, that communication strategies be developed and implemented that educate communities and promote appropriate treatment behaviors.

Actions to be taken by USAID/REACH

- Work with the MOH and partners to develop an appropriate communication strategy for promoting appropriate use of medications at the household level.
- Support the inclusion of this strategy within the BPHS, including its implementation in REACH provinces

Prevention of Malaria Infection

Between the mid-1950s and 1970 the use of indoor residual house spraying (IRS) with DDT almost eradicated *falciparum* malaria from Afghanistan while *vivax* incidence was very low. However, the enormous system requirements and high costs make the wide scale use of IRS an

impractical option. Alternatively, insecticide treated bednets (ITNs) have been shown to be an effective tool for the prevention of malaria and other vector borne diseases, such as leishmaniasis, in Afghanistan. While recent data indicate that less than 16% of households living in malaria endemic areas posses ITNs, in eastern areas of the country ITN coverage is 31%, reaching up to 60% in Jalalabad city itself, where social marketing sales campaigns have been particularly intense.

The Ministry of Public Health (MOH) for Afghanistan has recently prepared a draft "National ITN Strategy 2004-2008" that calls for 60% of the target population in Afghanistan to routinely sleep under an ITN during transmission season by 2008. It is expected that such coverage will directly contribute to a significant reduction of both malaria and leishmaniasis related illness. The MOH's strategy is consistent with Roll Back Malaria's "Framework for Going-to-Scale with ITNs" by emphasizing the need for simultaneously achieving sustainability and high coverage through the involvement of both the commercial sector and NGOs in the delivery of ITNs – with targeted subsidies directed at highly vulnerable populations. Achieving the target of 60% coverage set by the MOH will, however, require addressing the following issues:

- The commercial sector to-date has played a minor role in the provision of ITNs in Afghanistan. The commercial sector, however, is fairly robust in Afghanistan and currently plays an important role in the wide-scale provision of modern medicines, such as antimalarials. From countries as different as Vietnam and Tanzania the active involvement of the commercial sector has been shown to be central to achieving the long-term sustainability of ITNs. In Afghanistan there are two key barriers that undermine the engagement of the commercial sector – high government taxes and tariffs imposed on imported ITNs which undermine the availability of affordable ITNs through the commercial market and the uncertainty on consumer demand.

  Actions that should be supported by USAID/REACH:
    - Work with the Ministry of Finance to eliminate existing taxes and tariffs on ITNs
    - Explore options for local tailoring of ITNs using imported netting
    - Support generic demand generation campaigns for ITNs among the general public. This has been shown an effective approach to increasing capitol investment by local commercial players in ITNs.

- Ensuring the most vulnerable populations are not constrained by either cost or availability from enjoying the protective benefits of ITNs is the central rationale for the delivery of "targeted subsidies". However, it is important that such "subsidies" truly be targeted. Otherwise scarce pubic sector resources could be wasted subsidizing ITNs for those that could have afforded to pay the full commercial price, or end up flooding markets that otherwise could have been served by the commercial sector, but are now squeezed out because of commercially unviable subsidized prices.

  Actions to be supported by USAID/REACH:
    - Support the social marketing of targeted ITNs to clearly defined high risk groups, including its implementation in REACH provinces.

Malaria in Pregnancy

Evidence from sub-Saharan Africa has shown that infection by *falciparum* malaria during pregnancy puts pregnant women at severe risk of experiencing a spontaneous abortion, hemorrhaging and giving birth to a low-birth-weight baby – the most common condition

associated with neonatal death. A remarkably simple and affordable intervention that involves the taking of an antimalarial two times during the third trimester of pregnancy, however, has been found to fully protect pregnant women from the consequences malaria infection. As a consequence, the use of "intermittent preventive therapy" (IPT) with sulfadoxine-pyrimetamin has become a cornerstone of Roll Back Malaria's strategic approach to addressing malaria in areas of high *falciparum* transmission. Little data exist, however, on the risk posed by malaria infections during pregnancy in areas that are characterized by the transmission of predominately *vivax* malaria – as in the case in Afghanistan, or information on the effectiveness of IPT. There is an urgent need to clarify the relative risk of malaria infection during pregnancy in Afghanistan. Fortunately, the NGO Health Net International has received support to begin such an evaluation – and they should begin the work shortly. In the interim the following actions are recommended:

Actions for USAID/REACH

- Mounting an IPT program, at this point would be premature. It is recommended that REACH defer any such activities until there is data to support such an effort.
- However, REACH is strongly encouraged to support efforts to ensure pregnant women receive immediate access to the targeted delivery of subsidized nets to ensure they are protected from infection
- In addition, special emphasis should be placed in educating women and communities about the potential risks of malaria infection during pregnancy; messages that encourage pregnant women to use ITNs and seek early treatment with the onset of fevers.
- Lastly, health workers should be trained to be particularly attentive to recognizing and treating malaria in pregnant women.

<u>Towards a Strategic Approach: A Special Consideration</u>: The advent of the Global Fund for the Fight Against HIV/AID, Tuberculosis and Malaria (GFATM) has afforded extraordinary opportunities for leveraging significantly greater resources for TB and malaria control.. The Round 2 award to Afghanistan to support strengthening the capacity of TB and malaria programs and the pending Round 4 proposal which will focus on accelerated service delivery for these diseases raise important questions about how best to link USAID/REACH investments with those funded by the GFATM. USAID/Afghanistan needs to be commended for having already had the foresight to provide a full time staff person to assist managing the GFATM process in Afghanistan. We would encourage that detailing of a staff person to support the GFATM be continued. USAID/Afghanistan has the opportunity to further capitalize on the potential offered by the GFATM. Through its investment in implementing the BPHS it has the important opportunity to document those practices which are demonstrated to be most effective in achieving expanded delivery of quality TB and malaria services. These "best practices" can then serve as the platform for future GFATM supported efforts that can expand the delivery of services across the country. We would encourage REACH to make a special effort to document those "best practices" that can then inform and guide future GFATM activities.

Actions for USAID/REACH

- Continued support for GFATM coordination
- Documentation of "best practices" on delivery of TB and malaria services via BPHS
- Sharing of these "practices" within CCM for inclusion in future activities funded by GFATM

Summary of Malaria Activities

Intermediate Result	Central Level	Provincial Level	District Hospital	Comprehensive Health Center	Basic Health Center	Health Post
IR.1 Expanded BPHS	• Continued staff support for management /coordination of the GFATM. • Document BPHS "best practices" in REACH provinces for expanded national application by GFATM • Develop national RBM Strategic Plan • Develop national Standards and Guidelines for Dx/Rx, MIP and prevention • Develop clinical algorithms for diagnosis of malaria • Develop diagnostic strategies for differentiating between vivax and falciparum infection • Develop guidelines for management and referral of severe malaria • Support inclusion of Dx/Rx strategies and guidelines in BPHS training package • Support TOT for dissemination of training protocols • Asssess relative contribution of falciparum and vivax – • Work with MOF to eliminate taxes and tariffs on ITNs	• Support the development and implementation of a commercial and social marketing strategy for ITNs	• Train HW in diagnostic algorithms for simple and complicated malaria • Train HW in treatment protocols for simple and complicated malaria • Train microscopists in malaria diagnosis • Support targeted delivery of subsidized ITNs	• Train HW in diagnostic algorithms for simple and complicated malaria • Train HW in treatment protocols for simple and complicated malaria • Train microscopists in malaria diagnosis • Support targeted delivery of subsidized ITNs	• Train HW in diagnostic algorithms for simple and complicated malaria • Train HW in treatment protocols for simple and complicated malaria • Train HW in management of "first-line resistant" cases • Train HW in appropriate practices for referral of server/complicated malaria •	• Train HW in diagnostic algorithms for simple and complicated malaria • Train HW in treatment protocols for simple and complicated malaria • Train HW in appropriate practices for referral of server/complicated malaria

IR 2 Healthy Behaviors	• Development of a national BCC strategies for HH practices related to treatment and prevention including demand for and use of ITNs and promotion of appropriate use of medications at household level • Development of consuling guides and materials for HWs •	• Support the development and implementation of ITN demand generation campaign in targeted provinces •	• Support training of DH HWs in "good consuling" practices	• Support training of CHF HWs in "good consuling" practices	• Support training of BHF HWs in "good consuling" practices	• Support training of HP HWs in "good consuling" practices • Support implementation of HP community outreach highlighting appropriate behaviors for prevention and treatment of malaria
IR 3 Systems Strengthening	• Support capacity of MOH/NMCP to plan, manage, supervise and oversee national program through targeted staffing and professional training • Develop guidelines for an effective referral system for severe/complicated malaria	• Support PCC's capacity to plan , and coordinate malaria activities in targeted provinces through possible targeted staffing and relevant training opportunities • Support transitioning/integration of Regional Malaria Centers into Provincial BPHS structures • Strengthen provincial MCH logistics and supply system • Strengthen provincial HMIS to ensure efficient use of malaria resources • Strengthen provincial MCH supervisory and monitoring system	• Strengthen DH referral system for complicated malaria • Strengthen DH laboratory capacity • Strengthen capacity of DH to plan, manage and deploy resources for effective malaria treatment • Strengthen DH MCH logistics and supply system • Strengthen DH HMIS to ensure efficient use of malaria resources • Strengthen DH MCH supervisory and monitoring system	• Strengthen CHF referral system for complicated malaria • Strengthen CHF laboratory capacity • Strengthen capacity of CHC to plan, manage and deploy resources for effective malaria treatment • Strengthen CHF MCH logistics and supply system • Strengthen CHF HMIS to ensure efficient use of malaria resources • Strengthen MCH supervisory and monitoring system	• Strengthen BHF referral system for complicated malaria • Strengthen capacity of BHC to plan, manage and deploy resources for effective malaria treatment • Strengthen BHF MCH logistics and supply system • Strengthen BHF HMIS to ensure efficient use of malaria resources • Strengthen MCH supervisory and monitoring system	• Strengthen HP referral system for complicated malaria Strengthen capacity of HP to plan, manage and deploy resources for effective malaria treatment • Strengthen HP MCH logistics and supply system • Strengthen HP HMIS to ensure efficient use of malaria resources

Summary of Tuberculosis Activities

Intermediate Result	Central Level	Provincial Level	District Hospital	Comprehensive Health Center	Basic Health Center	Health Post
IR.1 Expanded BPHS	• Continued staff support for assisting in the management /coordination of the GFATM process. • Support the development of National norms and guidelines for the TB DOTS program and laboratory services manual, including a quality assurance program • With the MOH/WHO, assess training needs and materials and develop/adapt a comprehensive training package focusing on priority areas • Support the development of an organizational plan that takes into consideration both public and private sectors and job descriptions for all level of those involved in the NTP, including the laboratory network • As for the DOTS expansion plan: together with the MOH/WHO, consider the categorization of the REACH NGOs and plan DOTS expansion	• Select sites for TB DOTS based upon agreed criteria • Develop and implement a training plan for all levels of health workers (district level hospital, CHCs, BHC and CHWs in the selected sites • Develop and implement a plan for monitoring and supervision of DOTS expansion sites • Consider expansion to adjacent health units according to milestones achieved • Consider decentralized training in DOTS expansion, including case detection, management, drug supplies sub-national and other aspects of the program to the sub-national levels	• Support the training of laboratory microscopists in smear microscopy at both the district hospital and CHS levels (various opportunities are available and REACH should be aware of those and support the most efficient and effective approach) • Support the training of Lab techs to carry out their roles and responsibilities in the Quality Assurance system • Ensure systems are in place to provide DOTS services • Train staff at the CHC to provide DOTS and important components of referral	Provide quality case detection services, patient education and admission into the DOTS program Assess and determine how patient should receive DOTS (facility or community based) • Train HW at the BHP to provide follow-up to patients and their families	• Train CHW on the identification of TB suspects, referral and follow-up • Train CHW in basic principles of DOTS and how to provide directly observed therapy to clients in their catchments population • If smear microscopy is not available and travel is difficult, then arrange for sending sputum samples to the nearest CHC for microscopy. • Ensure the development and implement of a plan for regular monitoring and supervision of activities of all CHWs	As part fo REACH's monitoring and evaluation, ensure the quality of services provided by CHWs Provide good quality DOTS on a regular basis and refer patients when necessary for follow-up Maintain close collaboration with the BHC Report any difficulties to the BHC and refer patients with suspected drug-reactions

	accordingly • consider selection of areas for DOTS expansion where PPC is strong. And where the UN have long established programs • Support the develop of training materials for DOTS expansion for each level of service delivery, • Support the distribution of all necessary registers, treatment cards and referrals documents • Support TOT according to the DOTS expansion plan and include the sub-national levels as decentralized training sites					
IR 2 Healthy Behaviors	• Development of a national BCC strategies for HH practices related to early detection and treatment of TB cases Consider the development and implementation of a KAP study targeted to nurses and physicians in treating patients with TB. Define survey instrument and sampling methodology Based in the findings, Define strategies with budget at both the provincial levels to improve the quality of services	• Carry out targeted the KAP studies in selected population and the health provider communities	• Carry out targeted the KAP studies in selected population and the health provider communities	• Carry out targeted the KAP studies in selected population and the health provider communities	• Develop strategies for increasing the community support for transporting patients for referral • Ensure the CHWs implement DOTs for patients as part of the BPHC	• Participate in the development of and the implementation of strategies for community awareness around TB only after DOTS services are guaranteed • Support the implement of strategies for community mobilization around referral systems and general support for TB patients

IR 3 Systems Strengthening	• Support the "leadership" capacity development of MOH • Support the stewardship role of the MOH and in the coordination of all partners • Support efforts to improve and better define a National TB Strategy with objectives and indicator. • Support a multi-year work plan and coordination of key players in the funding • Support the development targeted staffing, especially at the sub-regional and provincial levels • Support human resource development plan including to meet the needs of DOTS expansion (job descriptions, performance evaluation plans, training, both refresher and new,. In this consider expanding the roles and responsibilities of nurses at all levels • Consider professional training opportunities outside Afghanistan such as in the Regional training center in Cairo, Egypt • Support the develop policies and guidelines for an effective referral system for severe / complicated tuberculosis including	• Support PCC's capacity to coordinate TB activities in targeted provinces through possible targeted staffing and relevant training opportunities • Support the development and implementation of annual training, monitoring and supervision based on well-constructed plans and available resources	• Ensure that the laboratory capacity for smear microscopy is strengthened and integrated into general PHC services • Ensure that lab staff are aware of biosafety measures employ them • Strengthen HMIS to ensure efficient use of malaria resources • Strengthen supervisory and monitoring system	• Strengthen referral system for complicated malaria • Strengthen laboratory capacity • Strengthen capacity of CHC to plan, manage and deploy resources for DOTS expansion • Strengthen HMIS to ensure efficient use of DOTS resources • Strengthen supervisory and monitoring system	• Strengthen referral system for complicated cases of TB • Strengthen capacity of BHC to plan, manage and deploy resources for effective DOTS • Strengthen HMIS to ensure efficient use of • Strengthen supervisory and monitoring system	

A Strategic Framework for Action against TB and Malaria In Afghanistan: Guidance to USAID/Afghanistan

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	side affects of treatment regimens • Develop plans for regular monitoring and supervision evaluation of national program • Strengthen capacity of MOH in overseeing the management of TB drugs, materials and supplies according to international standards (this should be considered a medium-term activity) • Support the development of research agenda and capacity to address the urgent needs of the TB program.					

Summary: In support of its health goal of "improved health of women of reproductive age and children less than five years of age" USAID/Afghanistan, in FY 2003 received approximately $50 million. Of this total $8 million was congressionally earmarked for use against infectious disease – specifically, $4 million for tuberculosis prevention and control and $4 million for malaria prevention and control. To ensure that these and any future infectious disease funds maximally contribute to achieving the health goal of USAID/Afghanistan and are used in accordance with Congressional intentions the following document – a strategic framework for action against TB and malaria - was developed by a team of technical experts[1] during a two week visit to Afghanistan – December 3-16, 2003. The framework emphasizes that these resources must be used in those areas of Afghanistan where these diseases represent public health burdens. In the case of malaria this means that REACH supported malaria activities should be focused in the 9 of the 13 REACH provinces which have documented cases (see map). TB, on the other hand, has been shown to be prevalent in all 13 provinces. As a core operating principal of this framework, however, both TB and malaria resources need not be limited to a specialized disease focus when considering the needs for expanding systems, improving quality of services, and contributing to enhanced community outreach. These resources should be seen as capable of contributing to the broader goals of the BPHS.

The major recommendations made to USAID/REACH by the team are summarized below:

1. As part of its ongoing support to the Country Coordinating Mechanism for the Global Fund for the Fight Against AIDS, TB and Malaria (GFATM) USAID/REACH should continue to support the posting of a dedicated staff person to the CCM. This arrangement has made an invaluable contribution to the efforts of CCM and will become increasing more valuable as activities supported by the Round 2 award move forward.
2. USAID/REACH should make a special effort to document the lessons in the 13 USAID/REACH provinces on how to best deliver TB and malaria services within the BPHS. These "best practices" should in turn be shared with the CCM to guide GFATM-financed expanded delivery of TB and malaria services.
3. To ensure adequate 'stewardship" the MOH and to contribute to the successful integration of TB and malaria into the BPHS USAID/REACH should actively support, through short-term technical assistance, the National Programs for TB and Malaria efforts to develop and disseminate national policies, norms, and guidelines for TB and Malaria
4. As part of its commitment to strengthening the National TB Program (NTB) USAID/REACH should consider hiring a dedicated, long-term REACH staff person to assist the NTB team plan, manage, coordinate, monitor and supervise the NTP integration into and implementation of the BPHS. USAID/REACH should also consider direct support to the National Malaria Program.
5. In the past, USAID/Afghanistan provided support to the malaria program through a grant with WHO – that has been instrumental in strengthening key aspects of the capacity of the national program. In the future it is recommended that USAID/REACH explore options for continuing such support.
6. As part of its commitment to systems strengthening USAID/REACH is encouraged to support the development of a human capacity development plan for implementation of TB and Malaria within the BPHS - with particular attention to enhancing the roles of nurses throughout the system

[1] Dennis Carroll, Senior Infectious Disease Advisor and Team Leader, USAID; Christine Whalen, Director TB and HIV/AIDS Unit, MSH; Paul Arnow, Infectious Diseases Advisor, MSH

7. As part of USAID/REACH commitment to a core TOT capacity (in support of the delivery of the BPHS) particular emphasis needs to be given to ensuring this capacity includes training packages for in TB and malaria service delivery
8. At the same time USAID/REACH together with the MOH and WHO should consider the development of decentralized regional training centers for TB (Kabul, Badakshan, Herat, Kandahar, Ghazni, Bamyan) where sub-national teams presently exist.
9. To ensure the technical and programmatic competency of REACH supported NGOs, USAID/REACH needs to support a "state of the art" training in DOTS expansion and malaria prevention and control. REACH needs to ensure that the NGOs who have received funding also receive training in DOTS expansion from the provincial teams cited in recommendation #8.. Selection criteria of initial NGOs to receive training should take into consideration (burden of disease, NGOs capacity, presence of a sub-nation office, and a strong committed PCC and infrastructure). Logistics will be facilitated by WHO
10. In the more comprehensive list of recommendations discussed below there are a number of critical operations research questions which need to be addressed as a prerequisite to finalizing important implementation strategies and the development of key guidelines and standards for TB and malaria. It is important that USAID/REACH either directly or in partnership with other key stakeholders support this operations research agenda.
11. REACH should consider hiring a dedicated staff person to manage the infectious diseases portfolio, with particular attention given to supporting the implementation of the tuberculosis and malaria activities, discussed in greater detail below.

<u>Background</u>: As part of a comprehensive approach to improving the health and well-being of the people of Afghanistan USAID, through the Rural Expansion of Afghanistan's Community-based Healthcare (REACH) Program, and in coordination with other donors, NGOs, and the Transitional Islamic Government of Afghanistan, has committed itself to expanding the delivery of a basic package of health care services throughout the rural areas of at least 13 of Afghanistan's 33 Provinces, with a total beneficiary population of 16.5 million people. The Basic Package of Health Services (BPHS) for Afghanistan adopted by the Transitional Islamic Government of Afghanistan and endorsed by the donor community provides an important framework for the re-establishment of an effective health program for the Afghani people. The control of tuberculosis and malaria are central components of the BPHS. The overall goal of USAID's REACH Program is to improve the health of women of reproductive age and of children less than five years of age, particularly in rural areas. Towards achieving this goal, USAID/Afghanistan is focused on supporting activities or tasks that will contribute towards achieving three intermediate results (IR). These IRs provide an effective framework for elaborating USAID's efforts in the prevention and control of malaria and tuberculosis and for achieving the overall objectives of the BPHS.

IR 1 Expanded access to a basic package of quality health services in rural areas, which will be achieved through:

- Expanding coverage of maternal health, family planning, child health services and control of infectious diseases of major concern through an increased number of rural health facilities and expanded community outreach.
- Improving the capacity of health providers to provide a basic package of health services promoted by the MOH in rural areas through:
    - Increasing the number and accessibility of skilled birth attendants and essential obstetric services
    - Training of community health workers
    - Refresher training of health staff in basic health centers and district hospitals

- Establishing teams of national trainers to provide training to community health workers and auxiliary midwives
- Development of a social marketing program that expands access to and use of a core package of public health goods, including contraceptives, oral rehydration salts, iodized salt, safe water and insecticide treated bednets.

IR 2 Improved capacity of individuals, families and communities in rural areas to protect their health, which will be achieved through:

- Promoting public health education program that addresses a broad set of individual and community practices that are essential for improved public health.

IR 3 Strengthened the MOH's capacity at national, provincial, and district level to plan, mange and allocate resources, which will be achieved through:

- Improving the capacity of the MOH at the National, Provincial and District levels in health planning, management, and allocation of resources by focusing on capacities related to human resource development, pharmaceutical management and health sector leadership

<u>The Burden of Tuberculosis and Malaria in Afghanistan – An Overview</u>: While the collection of data on TB and malaria have been greatly hampered by the events of the past three decades those data that are available underscore the significant contribution both of these diseases make to the overall health burden in Afghanistan.

Tuberculosis: Tuberculosis is a major public health problem in Afghanistan. This country has one of highest burdens of disease of the 22 most affected countries globally. The current estimates in Afghanistan suggest that approximately 150,000 people suffer from TB, with 70,000 new cases with 23,000 deaths occurring each year. In 2001 only 10,000 cases were notified through NGOs or government health facilities. In 2002, however, 14,000 of all types cases were reported, a 40% increase. Unlike most countries that report a predominance of male –female ratios, 67% of the reported cased in Afghanistan were female. In DOTS areas, 19.3% of the estimated TB cases (all types) and 20% of estimated smear positive cases were reported in 2000; 88% of those smear positive cases notified were reported as successfully treated

Malaria: Over the past two decades malaria has re-emerged as a serious public health problem, with over 18 million people (60% of the national population) now at risk from the disease – principally focused in 14 provinces of which 6 overlap with USAID/REACH provinces (see map). While accurate incidence data are not available almost 600,000 malaria cases were reported from all sources in 2002, with the total cases estimated at 3 million annually. According to a recent prevalence survey conducted by the MOH 10% of the population living at an altitude below 1500m is infected with malaria – with all age groups at risk. Of particular concern in recent years has been the emergence of two related and alarming trends - the marked increase in total cases of *plasmodium falciparum* malaria – the most lethal form of malaria - and the increasing failure of the most common treatment for *falciparum* malaria – chloroquine. Current estimates now have *falciparum* malaria accounting for an estimated 20% (600,000 cases) of malaria in Afghanistan (up from less than 1% in 1979), with *vivax* malaria accounting for the remainder. This increase in *falciparum* malaria is thought to be closely linked to the emergence of chloroquine resistance

<u>Towards a Strategic Approach for Tuberculosis</u>:

TB prevention and control is an essential component of the BPHS. REACH will need to ensure that elements of the DOTS Strategy are well integrated, at the same time, maintaining the integrity of the support systems that respect the NTP policies. In doing so REACH will need to consider not only the issues of access due to the security, geographic and natural elements, but also the complexities of the current situation. These other challenges include:

- The multiple stakeholders, including an evolving MOH, the key donors, and various implementing organizations
- a new MOH with radically different approach – that of Stewardship of the sector as opposed to service delivery
- The lack of definition as yet of an organizational structure of CD programs, including TB;
- The policies of integration of services at *all levels* to provide the BPHC to all citizens;
- An embryonic NTP – whose director has yet to be selected
- The NTI, which will presumably be subsumed into the new organizational structure
- A myriad of implementing agencies, whose experience in TB DOTS ranges from no experience – to over 30 years providing TB services
- The BPHS support systems that may not have taken into considerations the well-developed systems of a DOTS program including the information, monitoring and supervision systems at all levels

Additional issues that need to be considered when adapting the expansion of the DOTS strategy to Afghanistan and **actions for REACH** support are discussed below. The summary of Tuberculosis is organized according the background information and the DOTS Strategy framework (*political will, case detection, case management, regular drug supply, recording and reporting for monitoring and supervision)*. The IR/BPHS are presented in Table 2.

TB: Background information

Organization of the NTP: Over the past 27 years of war and civil strife and lack of political and financial support, tuberculosis activities have very limited. Four years after the MOH committed to the DOTS strategy the WHO re-located its office from Peshawar to Kabul. Since 2001 the MOH with strong support from WHO has made great strides in revitalizing tuberculosis prevention and control activities. The National Institute of Tuberculosis, supported largely by JICA funds, has acted as the National Program. The Director of the NTI has a staff of several dozen professionals and work in various departments: Epidemiology, Laboratory, Surveillance and Research, and provide clinical services thru the outpatient department at the NTI.

Policies: The DOTS Strategy and coverage: was introduced in 1997 but most activities were cancelled due to the conflict and lack of financial resources. In 2002 it was estimated that approximately 39% of health facilities were covered with DOTS. In most parts of the country, DOTS is facility-based and often services are located in urban areas, therefore access is limited for large sections of the rural population. Alternatively, patients must travel large distances, at great cost to themselves and their families.

Financing: There are several donors contributing to the Tuberculosis Control and include CIDA, the Italian Cooperation and JICA and now USAID trough the REACH Project. In addition, Afghanistan was awarded $3.15 M from the GFATM to fight TB Malaria and AIDS. Most of the GFATM funds are targeted to build and strengthen the capacity at the Central MOH in the integrated management of these three diseases. Very little of the GFATM funding has been earmarked for program implementation. Other sources of funding are directly targeted to various

NGOs who are implementing TB activities in different regions of the country (Med-AIR, CAC, Merlin, German Relief Services, ATA and others). These TB services provided by these NGOs may or may not be integrated into BPHS.

WHO has been instrumental in assisting the MOH through support to the development and the national strategies and operational plans, procurement and distribution of TB drugs, the provision of vehicles and office supplies, comprehensive training activities – including logistics management, support to regular meetings at both the Regional and national levels, incentives for regional staff and funds for decentralized supervision. WHO, together with the MOH has produced a detailed budget breakdown by component based on DOTS expansion strategy for 2002-2005. It estimates that a shortfall of USD$1 million in 2003 and as yet no funding has been secured for 2004.

The DOTS Strategy Framework

The IR/BPHS are presented in Table 2.

Political will[2]

To date the Director of the National TB Institute (supported by JICA) has acted as the National Program Manager and government focal point. An NTP manager has yet to be identified, but is expected to be named in these coming weeks.

The Department of Health care and Promotion in the MSO has been very involved in defining the BPHS. Its vision clearly articulates the integration of all components of the package at all levels. Discussions regarding the structure and organization of services are still ongoing. In addition to the Central level TB program Unit, organizational options currently under review entails the appointment of a Communicable Disease Officer in each Province. The responsibilities of this post will include the overall coordination of TB, Malaria, and outbreak investigations. The Provincial Coordinating Committee at each Provincial level will ensure that the needs of all PH programs are addressed and will be responsible for the coordination of both the private and public sectors to ensure the BPHC is delivered in an integrated fashion and increase population appropriately.
Draft National TB Manual: The draft has recently been up-dated and revised (2003) and will undergo translation into both Dari and Pushtun. This will need to be updated in the next year as the NTP will introduce FDCs through the GDF direct purchase.

Strategies and operational plans: A draft multi-year strategic plan for TB (2002-2005) has been developed by the MOH with support from WHO and other partners. An operational plan for DOTS expansion (2002) has also been produced and a final draft of the revised national guidelines for TB is set for the final round of revisions (2003). This operational plan is focused on facility – based targets rather then population – based targets.

Drugs: The Afghanistan NTP policy for drug regimens is currently implementing the 8- month regimen with Thiacetazone in the continuation phase. In addition, Standard 12 month regimens are employed for all those who cannot access DOTS services.

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[2] Selected indicators for Political Will include: Human resources, Financing, Regulations, and external evaluations

Regulations: There are no regulations that preclude the sale of TB drugs, therefore these drugs - loose, blister and in fixed dose combinations are readily available in pharmacies and bazaars throughout the country.

Human resources: there is no human resource development plan, although selected staff have received training in Japan and Iran. WHO has re-established 8 regional – or sub-national offices. These offices provide support, both in terms of logistics, financial and technical assistance and oversight to priority PH Programs to at least 4 provinces in each region.The MOH has seconded at least one physician to the TB Program within each sub-office and WHO provides them with financial incentives, as well as financial resources to carry out regular monitoring and supervisory activities.

External evaluations: There have not been any external reviews/evaluations of the National Program, nor are any planned.

Actions to be taken by USAID/REACH:

- REACH should consider creation of a FT position and the appointment of an individual that can provide the linkage between the project and the NTP and directed TA (preferably to enhance the leadership of the NTP Director).
- Engage in discussions with the MOH and, in addition to the CD officer, encourage the appointment of a TB coordinator, especially during DOTS expansion. This person should be responsible for training, monitoring and supervision and to ensure quality of services that are provided in an integrated fashion at the point of delivery.
- Ensure the NGOs responsible for service delivery participate in the PCC
- Ensure that the MOH, DOTS policies and practices are part of the training package of the BPHS – consider sharing REACH curriculum with various partners who are recognized in TB control activities and, request access to curricula and materials from other organizations****
- Ensure that REACH recipients standard training packages to ensure the provision of quality services and referrals.
- Ensure that REACH recipients work with provincial authorities to plan for and implement DOTS in an organized fashion: things to consider include: the appropriate ratio of microscopes to population; trained personnel at all levels; clear policies for providing DOT adapted to the local circumstances; system for regular monitoring and supervision at all levels

Case detection

In 2002, 19% of all estimated cases were reported. Case detection is largely passive. Women account for a large proportion of the cases detected (67%). Earlier this year WHO has engaged an anthropologist to carry out a study to assess this observation. It is not clear whether the methodology employed will be able to test any hypothesis as to the nature of these finding, however, valuable information on behavioral aspects of care seeking behavior may be forthcoming.

According to various health professionals interviewed during this mission, there is a general perception that the majority of patients will often consult first with private practitioners. After continuing or worsening health status, patients may consult in existing public sector facilities for diagnosis and treatment. To access MOH services, patients will often travel long distances and at great cost to themselves and their families. Many succumb to their disease as evidenced by the

number of deaths each year. Upon consultation to the NTP, many patients assessed to be in very advanced stages of disease.

Smear microscopy services: JICA has supported the re-construction of the National TB Institute and has provided training to three Lab techs, which can now provide training in smear microscopy. The NTI, with financing from JICA, is planning to continue to provide both diagnostic services, in addition to supporting national and research activities. Several NGOs have provided training to their own lab techs to perform smear microscopy targeted to their own facilities (MedAIR, MSF, ATA, GLA...), some together with the NTI. There was no information as to whether the quality of these services has been evaluated. MedAIR had requested a TB program evaluation in October, 2003 and this review may have included the assessment of lab services they provide. Currently the ATA is providing laboratory quality control for smear microscopy in 4 provinces and is the only laboratory that has capacity to do culture and sensitivity. As of yet, there is no national program of organized to provide quality assurance.

Actions to be taken by USAID/REACH

- REACH has developed training materials for laboratory services. These should be reviewed by recognized experts in TB Lab services already in the country to ensure concordance with national standards and guidelines, including biosafety standards.
- Although it has yet to be determined, training of lab techs will probably occur at the provincial level. If this is the case, REACH should coordinate these training activities, along with quality assurance activities with the NTP in the province.
- Ensure that Quality Assurance system of smear microscopy is operational in all REACH provinces and that REACH recipients are active participants in this network.

Case management

Once patients are diagnosed in a DOTS facility, they are registered into the program. Depending on the patient's access to existing treatment services, patients may be admitted to inpatient care (hospital or hospice) for the intensive phase, referred for DOTS to an established Treatment Center closest to their home, or be placed on a 12 month course of standard treatment regimen[3]. Each patient who is admitted into the program receives food support from the WFP during the full course of treatment. Of those patients receiving DOTS – the great majority are at facility-based institutions, either as inpatients or outpatients, with a reported outcome of 88% treatment success.

Observations made during site visits to a few government treatment centers included the lack of "compassionate care" towards the patients. Although many patients are female, nurses who are assigned to observe daily treatment are male. Treatment – or outpatient DOTS in two centers visited – was handed through a window with what seemed to be – limited direct observation.

Two of the NGOs interviewed that are well know in the country and provide urban TB DOTS services in Kabul have reported high defaulter rates. This is largely due to lack of services to locate patients. Defaulting usually occurs in the continuation phase of treatment.

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[3] According to WHO, approximately 10% of patients have been given the 12 month standard treatment regime

There are several NGOs who report that they provide Community Based DOTS through CHWs (DAC, MSF, MedAIR, ATA), although, with one exception[4], we did not have knowledge or access to any assessments of these services.

Physicians interviewed mentioned the stigma associated with treating TB patients in public facilities as two pronged: the perception of increased risk of transmission of the disease, and social factor of the clients. "TB patients are often very poor, and illiterate and health education messages need to be emphasized over and over", which seemed to frustrate some health care workers providing care.

Actions to be taken by USAID/REACH

- Consider categorizing NGOs who are recipients of REACH Grants into three categories:
    1. Those with no experience/infrastructure in Afghanistan and no experience in providing TB services
    2. Those with experience in Afghanistan and no experience in TB services
    3. Those that have experience in both
- Work with the MOH and WHO to devise a training plan based on needs according to categories suggested above
- Together with the MOH and WHO and other partners develop a plan for monitoring and supervision to ensure those NGOs that are new to providing TB Services, receive appropriate follow-up for expansion of services
- Ensure that prior to implementation of DOTS demonstration sites with new NGOs, an assessment is carried out regarding capacity of services (trained staff, referral systems, smear microscopy, materials for recording and reporting, registers… and drugs) are available
  (REACH may choose to develop a quick method of assessment for each level, that would not delay the process, pilot it, rivise it, train staff and distribute accordingly).

Adequate and regular drug supply.

Drug procurement and distribution: WHO has been responsible for TB drug procurement and distribution. Drugs for 2004 have been procured through the GDF with CIDA funds. Prior to engaging a full time logistics officer, there were regular problems with drug shortages. This was mainly due to either underestimation of requirements or mal distribution of stocks. In 2002 an assessment of drug logistics was carried out. Subsequent to that WHO, through the Kabul and regional offices have been responsible for all elements of drug management cycle, with close supervision. At the same time WHO has been working to enhance the capacity at the regional and provincial levels Durign quarterly meetings and supervisory activities.

Some of the NGOs are receiving TB drugs from their own organization and follow, for the most part, the drug regimens of the national government. Some NGOs provide Rifampicin as part of the continuation phase.

Actions to be taken by USAID/REACH

- Ensure REACH recipients are trained in, and follow NTP guidelines in all aspects of drug management

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[4] MedAIR requested a program review by an independent international TB expert in October 2003. Results are pending.